REMARKS

Claims 1 and 18 have been amended. Claims 1-19 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Objection to the Drawings:

The Examiner objected to the drawings because the view numbers are not in accordance with 37 CFR 1.84(u)(1). For example, the Examiner asked that "FIG. 1" replace "Figure 1", etc. The drawings have been corrected, as indicated on the replacement drawing sheets submitted herewith.

Objection to the Specification:

The Examiner objected to the specification, including the title and abstract, because the description of "server-free" operation is inaccurate. For at least the reasons presented below regarding the rejection under 35 U.S.C. § 112, second paragraph, Applicant disagrees. Applicant asserts that the term "server-free," as used in the specification, including the title and abstract, is accurate and is properly described in the specification.

Section 121 Restriction:

The Examiner acknowledged Applicant's timely traversal of the restriction requirement. The Examiner made the restriction requirement final. Applicant's maintain their traversal of the restriction requirement for at least the reasons stated in the previous response. Applicant will file a petition under 37 CFR 1.144 as a separate paper.

Section 112, Second Paragraph, Rejection:

The Examiner rejected claims 1-6 and 18-19, under 35 U.S.C. § 112, second paragraph, as indefinite. Specifically, the Examiner submits that the claims contain apparent contradictions regarding "server-free" backup. Applicant respectfully traverses this rejection for at least the following reasons.

The Examiner asserts "server-free" is a contradiction because, "If the backup operation is initiated by a backup server, then that operation is most certainly not server-free." Applicant reminds the Examiner that the Applicant is entitled to be his/her own lexicographer. M.P.E.P 2173.01 states, *"A fundamental principle contained in 35 U.S.C. 112, second paragraph is that applicants are their own lexicographers. They can define in the claims what they regard as their invention essentially in whatever terms they choose so long as any special meaning assigned to a term is clearly set forth in the specification."* As is clearly described in Applicant's specification, the term "server-free backup" refers to an operation in which, once initiated, the backup itself is performed (i.e., data is copied) without data passing through the backup server. For example, data is backed up without further the backup server that initiated the action having to move (e.g., read and write) the data itself. Thus, the actual backup with respect to the data is "server-free." Therefore, the use of the term "server-free" in the specification and claims does not involve any inconsistency. In fact, this terminology is widely used by those of ordinary skill in the art. While Applicant believes that the meaning of the phrase "server-free backup" in the claims would be easily understood by any one of ordinary skill in the art, claims 1 and 18 have been amended to more clearly reflect the meaning of the phrase. Since the meaning of the claim was already clear and definite, Applicant does not consider this amendment to alter the scope of the claim. Nor does Applicant consider the amendment to have been made for any reason of patentability.

For at least the reasons above, Applicant respectfully requests removal of the rejection of claims 1-6 and 18-19, under 35 U.S.C. § 112, second paragraph.

Section 102(e) Rejection:

The Examiner rejected claims 1-6 and 18-19 under 35 U.S.C. § 102(e) as being anticipated by Trimmer et al. (U.S. Publication 2004/0153739) (hereinafter "Trimmer") with Tamura et al. (U.S. Publication 2002/0199073) cited as extrinsic evidence. Applicant respectfully traverses this rejection for at least the following reasons.

Regarding claim 1, contrary to the Examiner's assertion, Trimmer fails to teach or suggest *a backup server configured to initiate a server-free backup through the SAN fabric of said backup data to one or more of the archival storage devices, wherein to perform said server-free backup, said backup data is copied to the one or more of the archival storage devices through the SAN fabric without said backup data passing through the backup server.* The Examiner cites paragraph [0010] as defining the term "backup data." This passage states, "backup data, for purposes of describing the preferred embodiments, is any data that has been backed-up from any type of computer network or application." In Trimmer, "backup data" is data being backed-up from primary data to the Virtual Tape Library (VTL). Trimmer teaches primary data may be backed-up to disks 54 and/or 56 of the VTL, and a clone of the backup data created within the VTL either simultaneously, or as a separate operation. The Examiner cites paragraphs [0014], [0020], [0027], and [0028] as teaching a serverless backup of this backup data to archival storage. However, in the case that a backup on disks 56 is created simultaneously with a backup on disks 54, the data copied to disks 54 and 56 is not backup data, but <u>primary data</u>. The generation of backups made simultaneously is called "serverless," in Trimmer, "because two sets of virtual tapes get created simultaneously without the need to create independent copies via the DPA," (i.e., without the need to perform a <u>second backup pass,</u> as stated in paragraph [0007]), not because the DPA or backup server are not used to copy the data to both sets of tapes. In addition, as described below, there is nothing in Trimmer that teaches or suggests that primary data is backed up to disks 54 or 56 (whether separately or simultaneously) <u>through a SAN fabric</u> having the limitations recited in claim 1.

In the case that backup data is copied from disks 54 to disks 56 later, or from disks 56 or 54 to disks or tape to be removed from the storage area following the backup of the primary data, there is nothing in Trimmer to teach that this operation is <u>initiated by the backup server</u>, as required by claim 1, nor that the backup data on disks 54 or disks 56 is copied to another disk or tape (e.g., an archival device) <u>through a SAN fabric having the limitations recited in claim 1</u>. In fact, it appears that this tape cloning operation (e.g., the serverless tape cloning of Trimmer) occurs <u>internally to the VTL</u>, without being initiated by a backup server connected to the VTL through computer network 56. The cloning operation in Trimmer certainly does not copy backup data <u>through a SAN fabric</u>. For example, paragraph [0014] states, in part, "…If the virtual tapes are kept in the VTL once the physical tapes are created, serverless tape cloning is achieved, resulting in a virtual tape that remains at the local site, and the equivalent physical tape that can be taken off-site. The operation is serverless <u>because the backup server and the DPA are not involved in this process</u>." Being serverless "because the backup server and the DPA are not involved in this process" does mean that the backup data is copied through a SAN fabric. In fact, since the backup server and DPA are not involved, the operation occurs internally within the VTL, not through a SAN fabric. Thus, Trimmer actually teaches away from the above-referenced limitations of Applicant's claim 1.

Further regarding claim 1, contrary to the Examiner's assertion, Trimmer fails to disclose *a <u>SAN fabric</u> comprising one or more <u>fabric devices</u> configured to couple the one or more host servers to the plurality of storage devices.* The Examiner admits a SAN is not mentioned by name in Trimmer, but asserts a SAN is inherent in Figure 2 of Trimmer and cites extrinsic evidence of a storage area network in Tamura, paragraph [0008], lines 1-3. However, Tamura does not teach that a SAN fabric comprising one or more fabric devices would <u>necessarily</u> be present in Trimmer's system. To the contrary, Tamura describes that many different types networks other than a SAN could be used, as in paragraph [0028]:

> A "Storage Area Network" or SAN for the purposes of the embodiments and claims of the present invention means any network, real or virtual, that has one of its primary functions to provide storage from one or more storage systems to one or more computer systems. <u>One example</u> would be

a SAN as given in the above background section, which is a storage area network includes Fibre Channels (FC), Fibre network switches and using a Fibre Channel Protocol (FCP). **Other examples** include a Local Area Network (LAN) with dedicated storage devices using an Asynchronous Transfer Mode (ATM), a Virtual Private Network (VPN) over the Internet with dedicated storage nodes, a LAN using Ethernet connecting a plurality of storage devices or a wireless network connecting a plurality of storage devices. An embodiment of a Fibre Channel SAN is disclosed in detail as one embodiment of the present invention. (emphasis added.)

Trimmer teaches a method of backing up data to a virtual tape library. Trimmer describes the system illustrated in Figure 2 (in paragraph [0030]) as comprising a Virtual Tape Library (VTL) connected to a Data Protection Application (DPA), which is connected to a computer network. A SAN comprising one or more fabric devices, as recited in claim 1, would not be inherent in Trimmer. The Examiner asserts that Tamura shows that that a SAN would be inherent in Trimmer. However, such extrinsic evidence "must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill." MPEP 2131.01.III; *Continental Can Co. USA v. Monsanto Co.,* 948 F.2d 1264, 1268, 20 USPQ2d 1746, 1749 (Fed. Cir. 1991). As shown above, Tamura actually teaches that other types of networks besides a SAN may be used in such application. Thus, contrary to the Examiner's assertion, Tamura actually proves that a SAN would not be inherent in Trimmer's system since Trimmer teaches that a SAN does not necessarily have to be used in such applications. The Virtual Tape Library of Trimmer could be connected to computer network 56 according to any of various configurations, including configurations other than a SAN fabric comprising fabric devices, such as those described in Tamura and noted above. It is clear from Tamura that such systems do not necessarily include a SAN fabric comprising one or more fabric devices configured to couple the one or more host servers to the plurality of storage devices, as recited in claim 1.

Applicant reminds the Examiner that anticipation requires the presence in a single prior art reference disclosure of each and every limitation of the claimed invention, arranged as in the claim. M.P.E.P 2131; *Lindemann Maschinenfabrik GmbH v. American*

Hoist & Derrick Co., 221 USPQ 481, 485 (Fed. Cir. 1984). The **identical invention** must be shown <u>in as complete detail</u> as is contained in the claims. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). For the reasons discussed above, Trimmer clearly cannot be said to anticipate claim 1.

For at least the reasons above, the rejection of claim 1 is unsupported by the cited art and removal thereof is respectfully requested.

Similar arguments apply to the rejection of claims 4 and 18.

Regarding claim 2, contrary to the Examiner's assertion, Trimmer fails to disclose, *"The SAN as recited in claim 1, further comprising a data mover, wherein the data mover is configured to copy the backup data to the one or more archival storage devices in response to a server-free copy command."* The Examiner cites FIG. 1, paragraph [0014], and the DPA (which the Examiner equates to Applicant's data mover) as teaching claim 2. However, this reference clearly does not teach the server-free copy command of Applicant's claim. For example, Trimmer's DPA cannot be analogous to the data mover of Applicant's claim, since paragraph [0014] of Trimmer explicitly describes the serverless tape cloning operation this way, "The operation is serverless because the backup server and <u>the DPA are not involved in this process.</u>" If the DPA is "not involved," it clearly cannot be configured to copy backup data. Therefore, Trimmer cannot be said to anticipate claim 2.

Therefore, for at least the reasons above, Applicant asserts that the rejection of claim 2 is not supported by the cited art, and removal thereof is respectfully requested.

Applicant also asserts that numerous other ones of the dependent claims recite further distinctions over the cited art. However, since the rejection has been shown to be unsupported for the independent claims, a further discussion of the dependent claims is not necessary at this time.

CONCLUSION

Applicant submits the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5760-16500/RCK.

Also submitted herewith are the following items:

☒ Replacement Drawings Sheets (5)

Respectfully submitted,

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